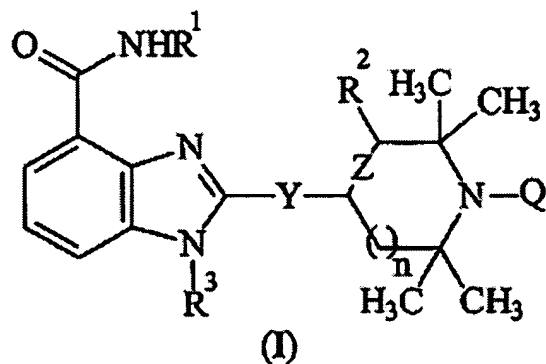


AMENDMENT TO THE CLAIMS

Please cancel claims 1-13 and add new claims 14-34 as follows:

Claims 1-13 (canceled).

14. (New) A compound of the formula



or a pharmaceutically acceptable or technically applicable salt thereof, wherein

R¹ represents hydrogen, C₍₁₋₄₎ alkyl, or C₍₁₋₄₎ alkoxy;

R² represents hydrogen, C₍₁₋₄₎ alkyl, carboxyl, C₍₁₋₄₎ alkoxycarbonyl, carboxamido, aryl, or hetero-aryl;

R³ represents hydrogen, C₍₁₋₄₎ alkyl, aryl-methylene, or aryl;

Y is a valency bond, a straight or branched chain C₍₁₋₄₎ alkene, a carbonyl-amino-C₍₁₋₄₎ alkene, or a -S-(CH₂)_m- group;

n represents zero or the integer 1;

m represents the integer 1, 2, or 3;

Q represents hydrogen, hydroxyl, or the oxygen radical (O[•]), or together with the N atom of the adjacent ring forms a +N=O (oxoimmonium) group;

Z represents a single or double bond; and

wherein any or all alkene groups may be spaced by an arylene group.

15. (New) The compound of formula (I) or pharmaceutically acceptable or technically applicable salt thereof according to claim 14, wherein

one or more of the aryl substituents are phenyl;

the hetero-aryl substituent is piperidine, pyrrole, or pyrrolidine; and/or one or more of the arylene groups are 6 or 12 membered arylene.

16. (New) The compound of formula (I) or pharmaceutically acceptable or technically applicable salt thereof according to claim 14, wherein the compound is selected from the group consisting of

2-(1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

4-(4-carbamoyl-1*H*-benzimidazol-2-yl)-1-oxyl-2,2,5,5-tetramethyl-pyrrolidine 3-carboxylic acid methyl ester radical;

4-(4-carbamoyl-1*H*-benzimidazol-2-yl)- 2,2,5,5-tetramethyl-pyrrolidine-3-carboxylic acid methyl ester;

2-(4-bromo-1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-(4-bromo-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-(1-oxyl-4-phenyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H* pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-(4-phenyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-[1-oxyl-2,2,5,5-tetramethyl-4-(3-trifluoromethyl-phenyl)-2,5-dihydro-1*H*-pyrrol-3-yl]-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-[2,2,5,5-tetramethyl-4-(3-trifluoromethyl-phenyl)-2,5-dihydro-1*H*-pyrrol-3-yl]-1*H*-benzimidazole 4-carboxylic acid amide;

2-[4-(1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-[4-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide;

2-(1,2,2,5,5-pentamethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-(1-acetyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-(1-methoxy-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-[4-(dibenzofuran-4-yl)-1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-[4-(dibenzofuran-4-yl)-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide;

(1-hydroxy-2,2,6,6-tetramethyl-1,2,3,6-tetrahydro-pyridin-4-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-(2,2,6,6-tetramethyl-1,2,3, 6-tetrahydro-pyridin-4-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-[4-(1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methoxy)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-[4-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methoxy)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide;

2-[3-methoxy-4-(1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methoxy)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-[3-methoxy-4-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methoxy)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide;

2-(5-oxyl-4,4,6,6-tetramethyl-4,6-dihydro-5*H*-thieno[2,3-*c*]pyrrol-2-yl)-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-(4,4,6,6-tetramethyl-4,6-dihydro-5*H*-thieno[2,3-*c*]pyrrol-2-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-(1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid isopropylamide radical;

2-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid isopropylamide;

1-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methyl)-1*H*-benzimidazole 4-carboxylic acid amide radical;

1-(2,2,6,6-tetramethyl-1,2,3,6-tetrahydro-pyridin-4-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

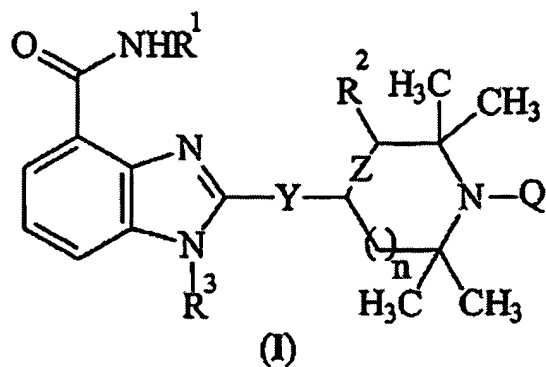
2-(1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methylsulphanyl)-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methyl-sulphanyl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-(1-oxyl-2,2,6,6-tetramethyl-1,2,3,6-tetrahydro-pyridin-4-yl-methylsulphanyl)-1*H*-benzimidazole 4-carboxylic acid amide; and

2-(2,2,6,6-tetramethyl-1,2,3,6-tetrahydro-pyridin-4-yl-methylsulphanyl)-1*H*-benzimidazole 4-carboxylic acid amide.

17. (New) The compound of formula (I) or pharmaceutically acceptable or technically applicable salt thereof according to claim 14, wherein the salt is formed with inorganic or organic acids.
18. (New) The compound of formula (I) or pharmaceutically acceptable or technically applicable salt thereof according to claim 14, wherein said salt is an oxalate, a hydrochloride, a hydrobromide, a sulphate, a phosphate, a phosphite, a borate, a lactate, an ascorbate, an acetate, a fumarate, a formate, a tosylate, a tartarate, a maleate, a citrate, a gluconate, or a besylate.
19. (New) A pharmaceutical composition for the treatment of a disease which can be favorably influenced by PARP inhibition and/or scavenging oxidative stress, comprising an effective dose of a compound of the formula



or a pharmaceutically acceptable or technically applicable salt thereof, wherein

R^1 represents hydrogen, $C_{(1-4)}$ alkyl, or $C_{(1-4)}$ alkoxy;

R^2 represents hydrogen, $C_{(1-4)}$ alkyl, carboxyl, $C_{(1-4)}$ alkoxycarbonyl, carboxamido, aryl, or hetero-aryl;

R^3 represents hydrogen, $C_{(1-4)}$ alkyl, aryl-methylene, or aryl;

Y is a valency bond, a straight or branched chain $C_{(1-4)}$ alkene, a carbonyl-amino- $C_{(1-4)}$ alkene, or a $-S-(CH_2)_m-$ group;

n represents zero or the integer 1;

m represents the integer 1, 2, or 3;

Q represents hydrogen, hydroxyl, or the oxygen radical (O^\cdot), or together with the N atom of the adjacent ring forms a $+N=O$ (oxoimmonium) group;

Z represents a single or double bond; and

wherein any or all alkene groups may be spaced by an arylene group.

20. (New) The pharmaceutical composition according to claim 19, wherein
 - one or more of the aryl substituents are phenyl;
 - the hetero-aryl substituent is piperidine, pyrrole, or pyrrolidine; and/or
 - one or more of the arylene groups are 6 or 12 membered arylene.
21. (New) The pharmaceutical composition according to claim 19, wherein the compound is selected from the group consisting of
 - 2-(1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1H-pyrrol-3-yl)-1H-benzimidazole 4-carboxylic acid amide radical;

2-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

4-(4-carbamoyl-1*H*-benzimidazol-2-yl)-1-oxyl-2,2,5,5-tetramethyl-pyrrolidine 3-carboxylic acid methyl ester radical;

4-(4-carbamoyl-1*H*-benzimidazol-2-yl)- 2,2,5,5-tetramethyl-pyrrolidine-3-carboxylic acid methyl ester;

2-(4-bromo-1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-(4-bromo-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-(1-oxyl-4-phenyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H* pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-(4-phenyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-[1-oxyl-2,2,5,5-tetramethyl-4-(3-trifluoromethyl-phenyl)-2,5-dihydro-1*H*-pyrrol-3-yl]-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-[2,2,5,5-tetramethyl-4-(3-trifluoromethyl-phenyl)-2,5-dihydro-1*H*-pyrrol-3-yl]-1*H*-benzimidazole 4-carboxylic acid amide;

2-[4-(1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-[4-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide;

2-(1,2,2,5,5-pentamethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-(1-acetyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-(1-methoxy-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-[4-(dibenzofuran-4-yl)-1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-[4-(dibenzofuran-4-yl)-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide;

(1-hydroxy-2,2,6,6-tetramethyl-1,2,3,6-tetrahydro-pyridin-4-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-(2,2,6,6-tetramethyl-1,2,3, 6-tetrahydro-pyridin-4-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-[4-(1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methoxy)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-[4-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methoxy)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide;

2-[3-methoxy-4-(1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methoxy)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-[3-methoxy-4-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methoxy)-phenyl]-1*H*-benzimidazole 4-carboxylic acid amide;

2-(5-oxyl-4,4,6,6-tetramethyl-4,6-dihydro-5*H*-thieno[2,3-*c*]pyrrol-2-yl)-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-(4,4,6,6-tetramethyl-4,6-dihydro-5*H*-thieno[2,3-*c*]pyrrol-2-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-(1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid isopropylamide radical;

2-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl)-1*H*-benzimidazole 4-carboxylic acid isopropylamide;

1-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methyl)1*H*-benzimidazole 4-carboxylic acid amide radical;

1-(2,2,6,6-tetramethyl-1,2,3,6-tetrahydro-pyridin-4-yl)-1*H*-benzimidazole 4-carboxylic acid amide;

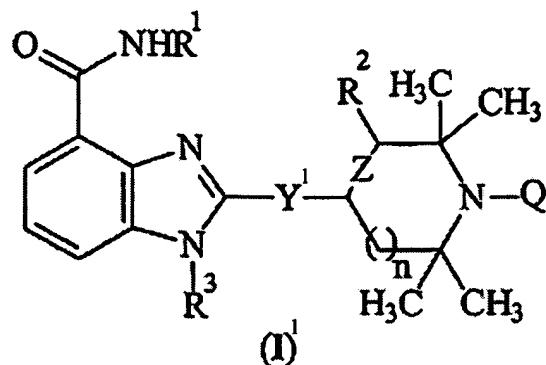
2-(1-oxyl-2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methylsulphanyl)-1*H*-benzimidazole 4-carboxylic acid amide radical;

2-(2,2,5,5-tetramethyl-2,5-dihydro-1*H*-pyrrol-3-yl-methyl-sulphanyl)-1*H*-benzimidazole 4-carboxylic acid amide;

2-(1-oxyl-2,2,6,6-tetramethyl-1,2,3,6-tetrahydro-pyridin-4-yl-methylsulphonyl)-1H-benzimidazole 4-carboxylic acid amide; and

2-(2,2,6,6-tetramethyl-1,2,3,6-tetrahydro-pyridin-4-yl-methylsulphonyl)-1H-benzimidazole 4-carboxylic acid amide.

22. (New) The pharmaceutical composition according to claim 19, wherein the salt is formed with inorganic or organic acids.
23. (New) The pharmaceutical composition according to claim 19, wherein said salt is an oxalate, a hydrochloride, a hydrobromide, a sulphate, a phosphate, a phosphite, a borate, a lactate, an ascorbate, an acetate, a fumarate, a formiate, a tosylate, a tartarate, a maleate, a citrate, a gluconate, or a besylate.
24. (New) The pharmaceutical composition according to claim 19, wherein the disease is selected from the group consisting of ischemia/reperfusion, inflammation, potentiation of cancer therapies, and combinations thereof.
25. (New) The pharmaceutical composition according to claim 19, wherein said composition is formulated for a route of administration selected from the group consisting of oral, transdermal, parenteral, intramuscular, and intravenous.
26. (New) The pharmaceutical composition according to claim 19, wherein said composition is formulated as a tablet, injection, solution, suppository, patch, or suspension.
27. (New) A method for the preparation of a compound of the formula



or a pharmaceutically acceptable or technically applicable salt thereof, wherein

R¹ represents hydrogen, C₍₁₋₄₎ alkyl, or C₍₁₋₄₎ alkoxy;

R² represents hydrogen, C₍₁₋₄₎ alkyl, carboxyl, C₍₁₋₄₎ alkoxycarbonyl, carboxamido, aryl, or hetero-aryl;

R³ represents hydrogen, C₍₁₋₄₎ alkyl, aryl-methylene, or aryl;

Y¹ is a valency bond, a straight or branched C₍₁₋₄₎ alkene, or a carbonyl-amino-C₍₁₋₄₎ alkene;

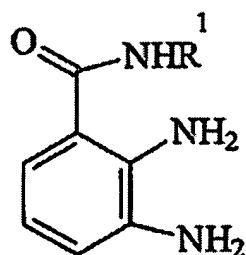
n represents zero or the integer 1;

Q represents hydrogen, hydroxyl, or the oxygen radical (O[·]), or together with the N atom of the adjacent ring forms a +N=O (oxoimmonium) group;

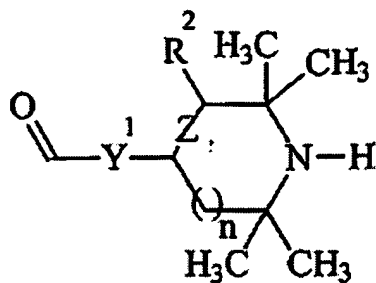
Z represents a single or double bond; and

wherein any or all alkene groups may be spaced by an arylene group, comprising:

reacting a carboxamide of the formula

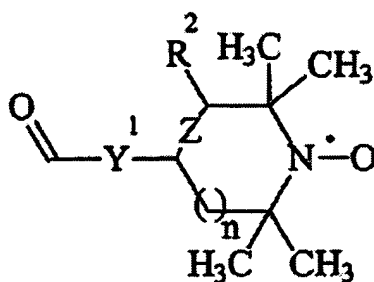


wherein R¹ has the meaning stated above, with a heterocyclic derivative of the formula



(V)

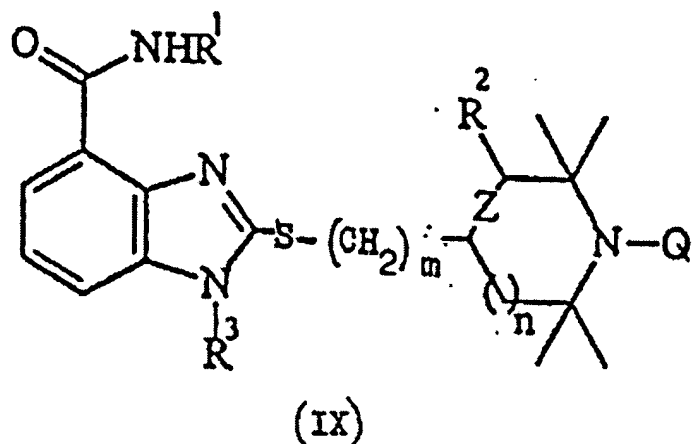
or



(VI)

wherein R^2 , Y^1 , Z , and n have the meanings stated above.

28. (New) The method of claim 27, wherein said salt is an oxalate, a hydrochloride, a hydrobromide, a sulphate, a phosphate, a phosphite, a borate, a lactate, an ascorbate, an acetate, a fumarate, a formiate, a tosylate, a tartarate, a maleate, a citrate, a gluconate, or a besylate.
29. (New) A method for the preparation of a compound of the formula



or a pharmaceutically acceptable or technically applicable salt thereof, wherein

R¹ represents hydrogen, C₍₁₋₄₎ alkyl, or C₍₁₋₄₎ alkoxy;

R² represents hydrogen, C₍₁₋₄₎ alkyl, carboxyl, C₍₁₋₄₎ alkoxycarbonyl, carboxamido, aryl, or hetero-aryl;

R³ represents hydrogen, C₍₁₋₄₎ alkyl, aryl-methylene, or aryl;

n represents zero or the integer 1;

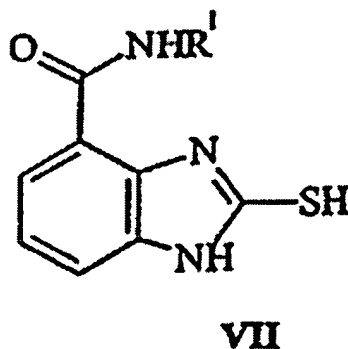
m represents the integer 1, 2, or 3;

Q represents hydrogen, hydroxyl, or the oxygen radical (O[•]), or together with the N atom of the adjacent ring forms a +N=O (oxoimmonium) group;

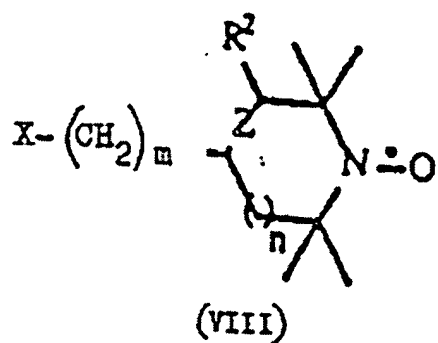
Z represents a single or double bond; and

wherein any or all alkene groups may be spaced by an arylene group, comprising:

reacting a compound of the formula

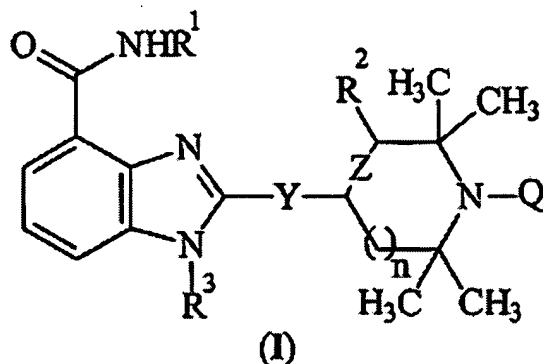


wherein R¹ has the meaning stated above, with an alkylating agent of the formula



wherein R^2 , Z, Q, n and m have the meanings stated above and X stands for a leaving group capable of reacting with the mercapto group to form a thioether, and optionally changing the substituents Q by way of oxidation and/or reduction to obtain the desired change in the substituents Q.

30. (New) The method according to claim 29, wherein the compound of formula (VIII) is a correspondingly substituted alkyl-halogenide or alkyl-sulphonate and the reaction is carried out in the presence of a base.
31. (New) The method according to claim 30, wherein the correspondingly substituted alkyl-halogenide or alkyl-sulphonate is a type selected from the group consisting of alkyl chloride, alkyl bromide, alkyl iodide, alkyl mesylate, alkyl tosylate, and alkyl triflate.
32. (New) The method of claim 29, wherein said salt is an oxalate, a hydrochloride, a hydrobromide, a sulphate, a phosphate, a phosphite, a borate, a lactate, an ascorbate, an acetate, a fumarate, a formate, a tosylate, a tartarate, a maleate, a citrate, a gluconate, or a besylate.
33. (New) A method for treating a disease that is based on PARP activation and/or are caused by Reactive Oxidative Species (ROS) and Reactive Nitrogen Species (RNS), comprising administering an effective dose of at least one compound of the formula



or a pharmaceutically acceptable or technically applicable salt thereof, wherein

R^1 represents hydrogen, $C_{(1-4)}$ alkyl, or $C_{(1-4)}$ alkoxy;

R^2 represents hydrogen, $C_{(1-4)}$ alkyl, carboxyl, $C_{(1-4)}$ alkoxycarbonyl, carboxamido, aryl, or hetero-aryl;

R^3 represents hydrogen, $C_{(1-4)}$ alkyl, aryl-methylene, or aryl;

Y is a valency bond, a straight or branched chain $C_{(1-4)}$ alkene, a carbonyl-amino- $C_{(1-4)}$ alkene, or a $-S-(CH_2)_m-$ group;

n represents zero or the integer 1;

m represents the integer 1, 2, or 3;

Q represents hydrogen, hydroxyl, or the oxygen radical (O^\cdot), or together with the N atom of the adjacent ring forms a $+N=O$ (oxoimmonium) group;

Z represents a single or double bond; and

wherein any or all alkene groups may be spaced by an arylene group,
in the form of a dosage form comprising said effective dose.

34. (New) The method according to claim 33, wherein the disease is selected from the group consisting of ischemia/reperfusion, inflammation, unfavorable reaction in the course of radiotherapy or chemotherapy, and combinations thereof.